The Nature Conservancy
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May 22, 2006

Dave Fruge, Coastal Resources Administrator
Louisiana Department of Natural Resources
617 North 3rd Street, 10th Floor
Baton Rouge, LA 70804-4027

Dear Mr. Fruge,

Attached is a Coastal Impact Assistance Program (CIAP) project nomination form entitled "Conservation of Coastal Forests in Louisiana." We acknowledge that the CIAP funds requested for this project are larger than anticipated; however, it cannot be overemphasized that the scale of the habitats targeted as well as the degree of threat to those habitats warrant a significant investment to be effective. I look forward to a favorable review of this proposal and we are available to answer any questions you or the other project reviewers may have.

Sincerely,

Keith Ouchley, Ph.D.
State Director

Cc: Greg Grandy, Coastal Engineering Division
Will Norman, Coastal Restoration Division

Conservation of Coastal Forests in Louisiana

Submitted by The Nature Conservancy of Louisiana

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Total CIAP Funds Requested: $36,192,500

Infrastructure Funds Proposed: -0-

Description and Location of Project:

As evidenced by Hurricanes Katrina and Rita, coastal forests are an extremely important component of the coastal landscape for the ecosystem services they provide. Published studies bear this out (Danielsen et al., 2005; Kathiresan and Rajendran, 2005; Reid and Whitaker, 1976; Raupach and Thom, 1981) as does anecdotal observation of storm effects from hurricanes Katrina and Rita (see Times Picayune article, March 23, Bob Marshall). The importance of coastal forests in reducing storm surge and wave action and in providing floodwater storage is indisputable. In addition to these services, Louisiana's coastal forested ecosystems offer important habitat for myriad wildlife species of interest to the state and federal government and in fact are identified in Louisiana's Comprehensive State Wildlife Conservation Program as such. Unfortunately, coastal forests have been significantly altered over the years by commercial and residential development, including countless OCS-oriented activities (pipelines, pumping stations, access canals, ICWW, etc.).

This proposal addresses the need to conserve these important habitats for the benefits that will accrue to the state and its citizens, including protection of homes, business and critical energy infrastructure, protection and restoration of rare and declining habitats, and conservation of priority indigenous wildlife. Four coastal forest types have been identified as a focus for this program: barrier island live oak forests (Grand Isle), live oak natural levee forests (Southeast Louisiana), chenier coastal live oak-hackberry forests (Southwest Louisiana), and swamp forests (primarily in the Lake Pontchartrain basin but also elsewhere in Southeast Louisiana).

It is estimated that upwards of $10 million could be spent on land protection projects within the first year of project initiation. Because of skilled in-state staff and a network of legal and technical support staff, The Nature Conservancy is poised to act quickly if funding is authorized; other conservation groups have similar capacity for quick action.

In order to effectively conserve coastal forests at a scale and pace that is congruent to the need, The Nature Conservancy envisions that approximately $36 million will be required for land acquisition over the next 3-5 years.

ACQUISITTION COSTS	COST/ACRE	ACRE GOAL	TOTAL COST
Barrier Island Live Oak Forests	$25,000	20	$500,000
Live Oak Natural Levee Forests	$3,000	1,500	$4,500,000
Chenier Forests	$3,500	2,500	$8,750,000
Swamp Forests	$700	30,000	$21,000,000
OTHER PROJECT COSTS			
Direct costs ($10,000/project/40projects)			$400,000
Indirect costs (3% purchase price)			$1,042,500
TOTAL PROJECT COST			$36,192,500

The Nature Conservancy envisions that any funds received from this proposal would be administered by LaDNR, perhaps via a new coastal forest conservation program created through the passage of HB 1105, now being considered in the state legislature. The Nature Conservancy and other qualified entities (state, other NGOs) would work in partnership with LaDNR to identify strategic coastal forest tracts and pursue permanent protection through purchase of fee or easements. These would be held in perpetuity and managed to advance the long-term goal of ecosystem viability and sustainability.

Land acquisition, though costly initially, is a relatively low cost long-term strategy for protection and restoration of important forested tracts across the coastal landscape. Acquisition priorities will be in step with the state's restoration strategies and targeted toward coastal forests that are or will be restored to healthy habitats that protect coastal communities and contribute to the protection of the state's coastal biodiversity.

Project type: This proposal falls within 3 identified project areas:

- Conservation, restoration and protection of coastal area, including wetland.
- Mitigation of damage to fish, wildlife and natural resources
- Implementation of a federally approved maritime, coastal, or comprehensive conservation management plan (State Comprehensive Wildlife Plan)

Project Justification:

Coastal forest habitats in Louisiana, like many habitats in the coastal zone, are imperiled. However, while much attention and literally hundreds of millions of dollars have been expended to conserve and restore other coastal habitats such as marshes and barrier islands, few resources have been allocated to critically important coastal forest habitats. Wholesale changes in hydrology, subsidence, and human development threaten the viability of these systems.

The Nature Conservancy and the State of Louisiana have been working to restore coastal live oak hackberry forests on Grand Isle for many years and have thus far protected approximately 100 acres of this globally rare habitat type. Development of oil and gas infrastructure and associated activities on the island has been directly responsible for clearing large amounts of the forested habitat on the island. While these forests provide important stopover habitat during spring migration for trans-gulf migrants, anecdotal accounts of storm damages after Katrina note that infrastructure nestled in dense woodland on the island was spared the extreme damage incurred by homes and buildings less protected. TNC's vision for Grand Isle is to help the local community better protect itself from future storms and increase ecotourism-based industries, while creating much needed habitat for neotropical migrants. Our goal is the protection and restoration of a minimum of 20 additional acres of barrier island forest on Grand Isle.

Residential, commercial and industrial development of live oak natural levee forests, found along the main stem and former distributaries of the Mississippi River, has resulted in a significant loss of this habitat type. As the highest ground in this low lying country, much of this forest has been cleared and the land is often used for placement of oil and gas facilities. These forest types are important to local communities for storm surge protection and they simultaneously provide habitat for many wildlife species. We have set a conservative goal to protect a minimum of 1,500 acres of this globally unique habitat.

For example, while the chenier plain coastal live oak hackberry forests in Southwest Louisiana have been recognized as important for mitigating storm surge and preventing saltwater intrusion into freshwater ecosystems, many have been cleared and developed for mineral extraction, residential purposes, roads and utility construction. Based upon previous conservation planning, a minimum of 2,500 acres of chenier forest is targeted for protection through fee title acquisition and/or conservation servitudes. Protection of these habitats will significantly reduce the risk of wholesale loss of property and life to associated human communities. It will also improve ecotourism opportunities wooded cheniers provide critically important stopover habitat for trans-Gulf migrant birds and these cheniers are located on the recently dedicated Louisiana Birding Trail.

Activities, including dredging canals for oil/gas exploration and pipelines, has dramatically altered coastal swamp hydrology and in many locations has prevented natural forest regeneration. This is especially alarming because increased pressure to harvest bald cypress swamps for cypress mulch may result in conversion of some swamps to open water. These systems require protection from further harvest and hydrologic restoration to ensure long-term viability. It is sobering to ponder what might have happened had the cypress forests associated with Lake Pontchartrain (i.e. Maurepas Swamp, LaBranche Wetlands) not been intact when Hurricane Katrina struck Southeast Louisiana. It is our intent that a majority of the funds in this CIAP proposal will be focused on acquisition of a minimum of 30,000 acres of coastal swamps.

Alignment With Ongoing Efforts:

Efforts to better understand threats to the sustainability of coastal forests resulted in the creation of the Governor's Science Working Group and Advisory Panel to the Science Working Group on Coastal Wetland Forest Conservation and Use, housed in the Governor's Office on Coastal Activities. TNC is a member of this advisory panel as are many of the partners that would be involved in this effort including LaDNR, Louisiana Department of Wildlife and Fisheries, U.S. Fish and Wildlife Service, and the Louisiana Office of Forestry. In partial summary, the mission of the group is to advise the Governor and the State on the following:

- identifying the State's coastal forest areas,
- identifying the threats to their sustainability,
- identifying and develop incentive-based programs to delay harvest of coastal forests, and
- identifying collaborative efforts to ensure that coastal forest functions, ecosystem services, and economic and cultural values will be available to present and future landowners and citizens of Louisiana and the Nation.

If awarded a CIAP grant, LaDNR, in partnership with TNC and other qualified entities, would be advancing the goals of the Governor's Working Group. It is clear that coastal forests are increasingly being recognized for the ecosystem services they provide and that the state is perhaps more committed than ever to their protection.

The recently approved state Comprehensive Wildlife Conservation Plan identifies coastal forests as conservation priorities as do TNC's ecoregional conservation plans, and conservation plans developed by the Lake Pontchartrain Basin Foundation, Baratarria Terrebonne National Estuary Program and others. Of significant importance, Coast 2050 and LCA both identify coastal ridges and natural levees as "critical structural components" of the estuarine landscape and recommend protection of these places as an important strategy for coastal restoration.

Project cost share:

There is no cash-based cost share identified for these CIAP funds; however, in-kind match will be significant. TNC and other partners pursuing acquisitions under this proposal will dedicate significant staff time on individual protection projects and long-term restoration and management costs will also be contributed by program participants. We also propose to use a portion of the value of the BP White Lake donation to the State of Louisiana as match for this project. It is expected that those properties that are not considered strategically important for long-term public ownership will be held in public trust by qualifying conservation organizations. Of note, TNC, in cooperation with the Louisiana Department of Natural Resources (LaDNR) and the Coalition to Restore Coastal Louisiana, is creating a new coastal land trust whose main function is to accept donations of coastal properties to facilitate the coastal restoration program in Louisiana. Total value of in-kind match is expected to exceed $10 million over the life of the project and significantly more if long-term land stewardship needs are also considered.

References:

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